



Strains of genetically modified prokaryotic micro-organisms capable of expressing polypeptides having the enzyme activity of the enzymes uridine phosphorylase (UdP) and purine nucleoside phosphorylase (PNP) are described; the strains in question can be used, both in the form of whole cells and in the form of crude or purified extracts, to catalyse transglycosylation reactions between a donor nucleoside and an acceptor base with particularly high yields. The associated plasmid vectors are also described.